



UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER NUMBER
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12

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 20 Nov 2003 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire Two (2) month(s), days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-9 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☒ Claims 1-8; 9 are allowed.
4. ☐ Claims _____ are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☒ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 November 2003 has been entered.

This application is in condition for allowance except for the following formal matters:

In the Specification:

The disclosure is objected to because of the following informalities: Page 3, line 29 & page 11, line 8, note that at each occurrence, "rhombohedrion" should be correctly spelled as ~~rhombohedron~~ --rhombohedron--. Page 32, line 31, note that "FMTSEC" remains vague in meaning and needs clarification in the specification. Page 45, lines 1, 2, note that "dicotron instability" remains vague in meaning and needs clarification in the specification. Appropriate correction is required.

In the Drawings:

The drawings are objected to because reference labels should be provided for those drawings depicting schematic aspects of the invention. In general, the drawing figures should contain reference labels corresponding to those described in the specification. Likewise, any new reference labels added to the drawing figures should be correspondingly added to the specification's description of the drawing figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 2817

In the Claims:

The following claims have been found objectionable for the reasons set forth below:

In claim 1, last paragraph, third line therein, note that a --,-- should follow "section" and "to" should be deleted and replaced by --wherein some of said electrons-- for a proper characterization; fourth line therein, "and" should be deleted and replaced by --to-- & "to" should be deleted and replaced by --said additional electrons-- for consistency of description; fifth line therein, note that --further-- should precede "additional" for clarity of description; sixth line therein, note that " N_{RF} periods" should be replaced by --a time t -- for consistency with the amended equation; ninth line therein, note that "and" should be deleted as being unnecessary; last line therein, note that the phrase --and ω is the radian RF frequency-- should be added to complete the definition of parameters in the amended equation.

In claim 9, line 6, note that --at least a-- should precede "first" for consistency of description; line 10, note that "N is an integer greater than or equal to one" should now be deleted as being unnecessary and the "," (i.e. after " δ_1 ") should be deleted as being unnecessary.

Comments:

Contrary to applicant's assertions, the objections to the specification and drawings remain outstanding since no amendments to the specification and no new drawings incorporating any changes thereto appear to have been filed in the response of 20 November 2003.

Allowable Claims:

Claims 1-8; 9 are allowable over the prior art of record.

Art Unit: 2817

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.

B. Lee

BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817